

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L13	1	((vertex or vertices) and (normal adj map) and attribute and tangent and diffuse and ambient).CLM.	US-PGPUB	OR	OFF	2007/06/21 14:05

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S210	24	S208 and (attribute or characteristic or voxel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 11:01
S208	40	S207 and (tangent near3 space)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 10:38
S209	13	("4467461"   "4984157"   "5313567"   "5410250"   "5455896"   "5537320"   "5586082"   "5722408"   "5798982"   "5852447"   "5966672"   "6144383").PN. OR ("7006085").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/21 10:18
S207	623	(color or depth) same ((normal or bump) near3 map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 10:16
S206	0	S203 and ((normal or bump) near3 map\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/06/21 10:15
S205	0	S203 and ((normal or bump) near3 map\$3)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/21 09:48
S203	41	("3662325"   "3781785"   "3995312"   "4070187"   "4169285"   "4210964"   "4228529"   "4247923"   "4279026").PN. OR ("4467461").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/21 09:48
S204	8	("4835712"   "5499323"   "5766129"   "5986662"   "6130671"   "6219059"   "6278459").PN. OR ("6940507").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/21 09:02
S202	24	S199 and (diffuse and ambient)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:59
S200	25	S198 and (diffuse and ambient)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:49

## EAST Search History

S19 8	91	S197 and (tangent and (vertices or vertex or point))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:48
S19 9	86	S196 and (tangent and (vertices or vertex or point))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:47
S18 2	30	S181 and (tangent and (vertices or vertex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:47
S19 7	617	(three-dimensional or "three dimensional" or "3D" or "3-D" or "3 D") and (bump adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:45
S19 6	534	((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (bump adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:45
S18 1	181	(three-dimensional or "three dimensional" or "3D" or "3-D" or "3 D") and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:45
S17 3	296	((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:45
S19 4	6	"dot product bump mapping"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:44
S19 5	0	"dot product bump map"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:40

## EAST Search History

S19 1	26	345/582.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:40
S19 3	0	"Dot3 bump map"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:37
S19 2	2	"Dot3 bump mapping"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:37
S18 9	18	345/426.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:37
S19 0	8	345/428.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:29
S18 8	1	345/424.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:29
S11	0	345/424.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:27
S18 7	2	S184 and (normal near3 map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:26
S18 6	1	S184 and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:26
S18 5	1	S184 and (vertices or vertex or point) and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:26

## EAST Search History

S18 4	400	345/440.ccls. and ("three dimensional" or "three-dimensional" or 3D or "3-D" or "3 D")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:25
S16 9	2	345/440.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/21 08:22
S18 0	9	voxel and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 15:36
S17 8	0	S177 and (normal adj map\$3)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/19 15:36
S17 7	8	("4835712"   "5499323"   "5766129"   "5986662"   "6130671"   "6219059"   "6278459").PN. OR ("6940507").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/06/19 15:31
S17 6	9	"6690820"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 15:18
S17 5	3	"20040081353"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 15:18
S17 4	14	S173 and (tangent adj space)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 15:17
S17 0	0	345/440.1.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 15:07

## EAST Search History

S17 2	2	(geospatial or geoseismic) and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 14:38
S17 1	10	((graph\$3 or chart\$3) near5 image) same (attribute or characteristic)) and (normal adj map\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 14:37
S16 7	13	345/581.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:46
S16 6	2	345/619.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:42
S16 8	1	345/424.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (normal adj map\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:41
S91	5	345/619.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:41
S16 5	92	382/109.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:29

## EAST Search History

S16 1	1	382/108.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:29
S15 7	1	382/108.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:29
S93	81	382/109.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:29
S16 3	0	382/195.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:28
S15 9	0	382/195.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:28
S15 5	0	382/108.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:28
S15 4	0	382/206.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:28
S94	0	382/206.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:28

## EAST Search History

S15 3	2	345/644.ccls. and (attribute near5 (vertices or vertex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:25
S15 1	1	345/612.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:25
S15 0	8	345/612.ccls. and (attribute near5 (vertices or vertex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:25
S15 2	0	345/644.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:24
S14 9	43	345/644.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:24
S14 6	13	345/584.ccls. and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:24
S14 5	8	345/584.ccls. and (attribute near5 (vertices or vertex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:24
S42	33	345/644.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:24
S14 8	53	345/612.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:23
S85	45	345/612.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:23



## EAST Search History

S38	5	345/584.ccls. and (attribute near5 (vertices or vertex))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 13:22
S14 4	77	345/584.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 11:13
S14 0	11	345/619.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:36
S13 9	2	345/619.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:35
S14 2	8	345/619.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:34
S43	1	345/619.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:34
S33	58	345/584.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:34
S13 7	3	345/428.ccls. and ((attribute same (vertex or vertices)) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:27
S13 5	49	345/426.ccls. and ((attribute same (vertex or vertices)) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:27

## EAST Search History

S13 3	3	345/581.ccls. and ((attribute same (vertex or vertices)) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:27
S12 8	6	345/581.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:27
S13 2	0	345/424.ccls. and ((attribute same (vertex or vertices)) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26
S13 1	14	345/581.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26
S12 9	16	345/581.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26
S26	0	345/424.ccls. and ((attribute same (vertex or vertices)) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26
S24	7	345/581.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26
S22	3	345/581.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:26

## EAST Search History

S12 6	10	345/428.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:13
S12 3	4	345/428.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:12
S12 4	0	345/428.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:11
S20	2	345/428.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:11
S12 2	6	S121 and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:02
S12 0	7	345/426.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:02
S11 9	130	345/426.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 10:02

## EAST Search History

S12 1	101	345/426.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:58
S11 8	5	345/424.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:58
S11 7	5	345/424.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:58
S11 4	2	chuter-christopher-john.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:58
S11 6	0	345/424.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57
S17	3	S16 and (normal adj map\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57
S15	98	345/426.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57
S14	4	345/426.ccls. and ((normal adj map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57

## EAST Search History

S13	4	345/424.ccls. and ((amplitude or frequency or phase or power or semblance or coherency or dip or azimuth or gradient or "fluid factor" or "acoustic impedance" or velocity or pressure or porosity or permeability or stratigraphy or lithology) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57
S12	4	345/424.ccls. and ((map\$4) and (diffuse near9 light\$3) and (ambient near9 light\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:57
S11 5	0	chuter-chris.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:55
S63	2	chuter-christopher-john.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:55
S62	0	chuter-chris.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/06/19 09:55
S11 3	6	"6690820"	USPAT	OR	OFF	2007/06/18 15:53
S11 2	3	"6765570"	USPAT	OR	OFF	2007/06/18 15:52



Terms used tangent space normal  
map attribute diffuse ambient image

Found 6 of 204,472

Sort results  
by



[Save results to a Binder](#)

Try an [Advanced Search](#)

Try this search in [The ACM Guide](#)

Display  
results



[Search Tips](#)

☐ Open results in a new  
window

Results 1 - 6 of 6

Relevance scale ☐ ☐ ☐ ☐ ☐

1 An open-source CVE for programming education: a case study: An open-source CVE  
for programming education: a case study



Andrew M. Phelps, Christopher A. Egert, Kevin J. Bierre, David M. Parks  
July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

**Publisher:** ACM Press

Full text available: [pdf\(7.92 MB\)](#)

Additional Information: [full citation](#), [references](#)

2 Real-time shading



Marc Olano, Kurt Akeley, John C. Hart, Wolfgang Heidrich, Michael McCool, Jason L. Mitchell,  
Randi Rost  
August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

**Publisher:** ACM Press

Full text available: [pdf\(7.39 MB\)](#)

Additional Information: [full citation](#), [abstract](#)

Real-time procedural shading was once seen as a distant dream. When the first version of this course was offered four years ago, real-time shading was possible, but only with one-of-a-kind hardware or by combining the effects of tens to hundreds of rendering passes. Today, almost every new computer comes with graphics hardware capable of interactively executing shaders of thousands to tens of thousands of instructions. This course has been redesigned to address today's real-time shading capabili ...

3 Physically based reflectance for games: Reflectance rendering with point lights



Naty Hoffman, Dan Baker  
July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

**Publisher:** ACM Press

Full text available: [pdf\(1.30 MB\)](#)


Additional Information: [full citation](#)

4 A user-programmable vertex engine



Erik Lindholm, Mark J. Kligard, Henry Moreton  
August 2001 **Proceedings of the 28th annual conference on Computer graphics and  
interactive techniques SIGGRAPH '01**

**Publisher:** ACM Press

Full text available:  [pdf\(12.03 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper we describe the design, programming interface, and implementation of a very efficient user-programmable vertex engine. The vertex engine of NVIDIA's GeForce3 GPU evolved from a highly tuned fixed-function pipeline requiring considerable knowledge to program. Programs operate only on a stream of independent vertices traversing the pipe. Embedded in the broader fixed function pipeline, our approach preserves parallelism sacrificed by previous approaches. The programmer is presente ...

**Keywords:** graphics hardware, graphics systems


## 5 Meshes & surfaces: Real-time relief mapping on arbitrary polygonal surfaces



Fábio Policarpo, Manuel M. Oliveira, João L. D. Comba

April 2005 **Proceedings of the 2005 symposium on Interactive 3D graphics and games I3D '05**

**Publisher:** ACM Press

Full text available:  [pdf\(884.41 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

This paper presents a technique for mapping relief textures onto arbitrary polygonal models in real time. In this approach, the mapping of the relief data is done in tangent space. As a result, it can be applied to polygonal representations of curved surfaces producing correct self-occlusions, interpenetrations, shadows and per-pixel lighting effects. The approach can be used to consistently add surface details to geometric models undergoing deformations, such as in the case of animated characte ...

**Keywords:** image-based rendering, motion parallax, real-time rendering, relief mapping, surface details

## 6 Skin in the "Dawn" demo



Curtis Beeson, Kevin Bjorke

May 2004 **ACM SIGGRAPH Computer Graphics**, Volume 38 Issue 2

**Publisher:** ACM Press

Full text available:  [pdf\(559.83 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#)

Results 1 - 6 of 6

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



Terms used [tangent space](#) [normal map](#) [attribute](#) [image](#)

Found 12 of 204,472

Sort results by



[Save results to a Binder](#)

[Try an Advanced Search](#)

Display results



[Search Tips](#)

[Try this search in The ACM Guide](#)

☐ Open results in a new window

Results 1 - 12 of 12

Relevance scale ☐ ☐ ☐ ☐ ☐


1 [An open-source CVE for programming education: a case study: An open-source CVE](#)



[for programming education: a case study](#)

Andrew M. Phelps, Christopher A. Egert, Kevin J. Bierre, David M. Parks  
July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

**Publisher:** ACM Press

Full text available:  [pdf\(7.92 MB\)](#)

Additional Information: [full citation](#), [references](#)

2 [Meshes & surfaces: Real-time relief mapping on arbitrary polygonal surfaces](#)



Fábio Polcarpo, Manuel M. Oliveira, João L. D. Comba

April 2005 **Proceedings of the 2005 symposium on Interactive 3D graphics and games I3D '05**

**Publisher:** ACM Press

Full text available:  [pdf\(884.41 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

This paper presents a technique for mapping relief textures onto arbitrary polygonal models in real time. In this approach, the mapping of the relief data is done in tangent space. As a result, it can be applied to polygonal representations of curved surfaces producing correct self-occlusions, interpenetrations, shadows and per-pixel lighting effects. The approach can be used to consistently add surface details to geometric models undergoing deformations, such as in the case of animated characters ...

**Keywords:** image-based rendering, motion parallax, real-time rendering, relief mapping, surface details


3 [Physically based reflectance for games: Reflectance rendering with point lights](#)



Naty Hoffman, Dan Baker

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

**Publisher:** ACM Press

Full text available:  [pdf\(1.30 MB\)](#)

Additional Information: [full citation](#)

4 [Real-time shading](#)



Marc Olano, Kurt Akeley, John C. Hart, Wolfgang Heidrich, Michael McCool, Jason L. Mitchell,





Randi Rost  
August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

**Publisher:** ACM Press

Full text available: pdf(7.39 MB) Additional Information: [full citation](#), [abstract](#)

Real-time procedural shading was once seen as a distant dream. When the first version of this course was offered four years ago, real-time shading was possible, but only with one-of-a-kind hardware or by combining the effects of tens to hundreds of rendering passes. Today, almost every new computer comes with graphics hardware capable of interactively executing shaders of thousands to tens of thousands of instructions. This course has been redesigned to address today's real-time shading capabili ...



## 5 A user-programmable vertex engine



Erik Lindholm, Mark J. Kligard, Henry Moreton  
August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques SIGGRAPH '01**

**Publisher:** ACM Press

Full text available: pdf(12.03 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this paper we describe the design, programming interface, and implementation of a very efficient user-programmable vertex engine. The vertex engine of NVIDIA's GeForce3 GPU evolved from a highly tuned fixed-function pipeline requiring considerable knowledge to program. Programs operate only on a stream of independent vertices traversing the pipe. Embedded in the broader fixed function pipeline, our approach preserves parallelism sacrificed by previous approaches. The programmer is presente ...

**Keywords:** graphics hardware, graphics systems

## 6 Advanced real-time rendering in 3D graphics and games: Artist-directable real-time rain rendering in city environments



Natalya Tatarchuk  
July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

**Publisher:** ACM Press

Full text available: pdf(1.98 MB) Additional Information: [full citation](#), [abstract](#), [references](#)

In this chapter we will cover approaches for creating visually complex, rich interactive environments as a case study of developing the world of ATI "ToyShop" demo. We will discuss the constraints for developing large immersive worlds in real-time, and go over the considerations for developing lighting environments for such scene rendering. Rain-specific effects in city environments will be presented. We will overview the lightning system used to create illumination from the lightning flashes, t ...



## 7 The Direct3D 10 system



David Blythe  
July 2006 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2006 Papers SIGGRAPH '06**, Volume 25 Issue 3

**Publisher:** ACM Press

Full text available: pdf(377.38 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)  
 mov(23:56 MIN)

We present a system architecture for the 4<sup>th</sup> generation of PC-class programmable graphics processing units (GPUs). The new pipeline features significant additions and changes to the prior generation pipeline including a new programmable stage capable of generating additional primitives and streaming primitive data to memory, an expanded, common feature set for all of the programmable stages, generalizations to vertex and



image memory resources, and new storage formats. We also describ ...

**Keywords:** graphics systems, programmable graphics hardware, programmable shading

8 Shader-based rendering: Relief mapping of non-height-field surface details



Fabio Policarpo, Manuel M. Oliveira

March 2006 **Proceedings of the 2006 symposium on Interactive 3D graphics and games I3D '06**

**Publisher:** ACM Press

Full text available: pdf(664.68 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [index terms](#)

The ability to represent non-height-field mesostructure details is of great importance for rendering complex surface patterns, such as weave and multilayer structures. Currently, such representations are based on the use of 3D textures or large datasets of sampled data. While some of the 3D-texture-based approaches can achieve interactive performance, all these approaches require large amounts of memory. We present a technique for mapping non-height-field structures onto arbitrary polygonal mode ...

**Keywords:** image-based rendering, impostors, non-height-field surface representation, real-time rendering, relief mapping

9 Advanced real-time rendering in 3D graphics and games: Practical parallax occlusion mapping with approximate soft shadows for detailed surface rendering



Natalya Tatarchuk

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

**Publisher:** ACM Press

Full text available: pdf(1.12 MB)

Additional Information: [full citation](#), [references](#)

10 A survey of methods for recovering quadrics in triangle meshes



Sylvain Petitjean

June 2002 **ACM Computing Surveys (CSUR)**, Volume 34 Issue 2

**Publisher:** ACM Press

Full text available: pdf(3.91 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In a variety of practical situations such as reverse engineering of boundary representation from depth maps of scanned objects, range data analysis, model-based recognition and algebraic surface design, there is a need to recover the shape of visible surfaces of a dense 3D point set. In particular, it is desirable to identify and fit simple surfaces of known type wherever these are in reasonable agreement with the data. We are interested in the class of quadric surfaces, that is, algebraic surfa ...

**Keywords:** Data fitting, geometry enhancement, local geometry estimation, mesh fairing, shape recovery

11 Skin in the "Dawn" demo



Curtis Beeson, Kevin Bjorke

May 2004 **ACM SIGGRAPH Computer Graphics**, Volume 38 Issue 2

**Publisher:** ACM Press

Full text available: pdf(559.83 KB) Additional Information: [full citation](#), [references](#), [citations](#)

12 Shader-based rendering: Abstract shade trees



Morgan McGuire, George Stathis, Hanspeter Pfister, Shriram Krishnamurthi

March 2006 **Proceedings of the 2006 symposium on Interactive 3D graphics and games I3D '06**

**Publisher:** ACM Press

Full text available:  [pdf\(455.38 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

As GPU-powered special effects become more sophisticated, it becomes harder to create and manage effect interaction using the fairly primitive shading languages. This difficulty also introduces a workflow problem: artists design effects but only programmers can implement them, making it impossible for them to work asynchronously. To address these problems we present *abstract shade trees* and heuristic algorithms that operate over them. The trees allow designers to easily create effects by c ...

Results 1 - 12 of 12

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

☐ [Search Session History](#)

[BROWSE](#)

[SEARCH](#)

[IEEE XPLORE GUIDE](#)

Edit an existing query or  
compose a new query in the  
Search Query Display.

Thu, 21 Jun 2007, 10:15:28 AM EST

Search Query Display

Select a search number (#)  
to:

- Add a query to the Search Query Display
- Combine search queries using AND, OR, or NOT
- Delete a search
- Run a search

Recent Search Queries

#1 (((normal <or> bump) <and> (map <or> mapping) <and> (vertex  
<or> vertice <or> point) <and> (normal <and> tangent <and>  
diffuse <and> ambient))<in>metadata)

**RESULT LIST**

**0** results found in the Worldwide database for:

**diffuse and ambient and bump and map** in the title or abstract

(Results are sorted by date of upload in database)

---

Data supplied from the **esp@cenet** database - Worldwide

**RESULT LIST**

**0** results found in the Worldwide database for:

**diffuse and ambient and normal and map** in the title or abstract

(Results are sorted by date of upload in database)

---

Data supplied from the **esp@cenet** database - Worldwide

# Searching PAJ

[MENU](#)[NEWS](#)[HELP](#)

Search Results : 0

[Clear](#)**Text Search**

If you want to conduct a Number Search, please click on the button to the right.

[Number Search](#)

**Applicant, Title of invention, Abstract** --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

[OR](#)

AND

[AND](#)

AND

[OR](#)

AND

**Date of publication of application** --- e.g. 19980401 - 19980405

AND

**IPC** --- e.g. D01B7/04 A01C11/02

If you use the OR operation, please leave a SPACE between keywords.

[Search](#)[Stored data](#)

# Searching PAJ

[MENU](#)[NEWS](#)[HELP](#)

Search Results : 0

[Clear](#)[Text Search](#)

If you want to conduct a Number Search, please click on the button to the right.

[Number Search](#)

**Applicant, Title of invention, Abstract** --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

[OR](#)

AND

[AND](#)

AND

[OR](#)

AND

**Date of publication of application** --- e.g. 19980401 - 19980405

AND

**IPC** --- e.g. D01B7/04 A01C11/02

If you use the OR operation, please leave a SPACE between keywords.

[Search](#)[Stored data](#)